



住房和城乡建设部土建类学科专业“十三五”规划教材
高校建筑学专业规划推荐教材

PROFESSIONAL

建筑学专业英语

(第二版)

王一 岑伟 金倩 编著

ENGLISH IN
ARCHITECTURE

中国建筑工业出版社

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本教材的编写以建筑学专业英语在教学内容和教学方式上的创新探索为出发点,力求外语教学内容同建筑学专业培养要求相结合,紧密结合建筑学专业应用的实际需要,对学生进行以阅读和表达为核心的语言训练,促进学生在本专业领域内以英语为媒介获取信息和表达能力的提高。同时结合语言教学拓宽学生的专业知识面,以适应建筑学专业教育的国际化趋势和学生进一步的专业发展。



王一，博士，同济大学建筑与城市规划学院副教授，博士研究生导师，担任建筑系副主任，建筑学学科专业委员会委员、建筑学专业教育委员会副主任、中美生态城市设计联合实验室执行副主任、中国建筑学会城市设计分会理事等职。主要研究方向为城市设计理论和生态城市设计方法。近年来发表学术论文数十篇，主持和参与了大量城市设计实践项目，获省部级设计奖项十余项。

Wang Yi, Ph.D., is Associate Professor of Architecture and Urban Design and Deputy Director of Architecture Department at College of Architecture and Urban Planning, Tongji University. He is also Executive Director of

Sino-US Ecological Urban Design Joint Lab co-founded by Tongji and Georgia Tech, and Director of Urban Design Branch of China Architecture Society. His teaching and research is focused on theory of urban forms, and ecological urbanism. His research writings and prize-winning design works have been widely published.



岑伟，2004年博士毕业后在同济大学建筑系任教。先后担任助教、讲师、副教授。同济大学——新南威尔士大学建筑学本科双学位项目负责人。主要研究方向为传统村落地权变动的微差和空间形态的互动，多次主持了科研、教学改革及建筑设计研究项目，发表学术论文多篇。

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金倩，2013年毕业于英国剑桥大学后，在同济大学建筑与城市规划学院建筑系任助理教授。主要研究方向为建筑舒适度和能耗模拟，以及适应性建筑表皮的模拟与优化设计。主持和参与了国家级科研项目3项，发表科研论文20余篇。

Jin Qian started to work as Assistant Professor at the Department of Architecture in College of Architecture and Urban Planning, Tongji University, after her graduation from University of Cambridge in 2013. Her fields of expertise include numerical simulation for occupant comfort and energy demand assessment in buildings, characterization of adaptive façade components and integrated numerical evaluation and optimisation of their performance. She participated in 3 national research projects and has more than 20 peer-reviewed publications to her credit.

Forwards 前言

《建筑学专业英语》是建筑学专业本科及相关专业学生在大学基础英语学习阶段之后,为进一步学习和提高在本专业领域内以英语为工具进行阅读、表达的综合技能而使用的教材。

本教材的编写以建筑学专业英语在教学内容和教学方式上的创新探索为出发点,力求外语教学内容同建筑学专业培养要求相结合,紧密结合建筑学专业应用的实际需要,对学生进行以阅读和表达为核心的语言训练,促进学生在本专业领域内以英语为媒介获取信息和表达能力的提高。同时结合语言教学拓宽学生的专业知识面,以适应建筑学专业教育的国际化趋势和学生进一步的专业发展。

全书共 36 个单元,能满足两个学期 36 周的使用要求。每个单元由四个方面的内容构成:①专业文献精读(Intensive Reading);②专业文献泛读(Extensive Reading);③写作、翻译或口语表达技巧(Tips for Writing, Translation and Oral Presentation);④视听训练(Media Analysis)。视听训练部分由教师根据实际教学情况灵活掌握上课内容,不限于本书推荐的范围。

在教材编写过程中,得到了同济大学建筑与城市规划学院及建筑系的大力支持,教师同行的诚恳建议,以及同济大学建筑学专业和历史建筑保护工程专业学生的积极参与和配合,在此一并表示感谢。

本教材可以供建筑学专业本科及相关专业使用,建筑学专业硕士研究生的专业英语教学亦可选用本教材的部分内容。

由于编著者水平有限,有错误或不当之处欢迎读者不吝赐教。

编著者

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Unit 01

Section 1 Intensive Reading

A City Is Not a Tree
Christopher Alexander

Part I

Introduction Many design professionals admire and attempt to incorporate into their designs for the built environment elements reflecting underlying human psychological and spiritual needs and cultural values. But none has broken so completely with conventional architectural practice and sought more deeply to make his designs reflect these fundamental values than Austrian-born, British-trained, U. S. -based architect/planner Christopher Alexander.

Alexander is a self-proclaimed iconoclast, deliberately distancing himself from virtually all the major mainstream currents of twentieth-century architectural and planning thought. It is notable that the eight “treelike” plans he singles out for attack in the following selection represent a diverse set of the most respected and famous twentieth-century plans from Le Corbusier’s plan for the new town of Chandigarh, India, based on his principles for a contemporary city, to Paolo Soleri’s visionary megastructure of Mesa City in the Arizona desert.

Since publication of his provocative early attack on the sterility of formal “treelike” city plans in the following selection, Alexander has been engaged in a lifelong search to decipher the deep structures underlying human needs and to define recurring patterns for a new paradigm of architecture. The following selection is clear that a city should not be designed with a neatly branching treelike organization dividing functions from each other. Alexander condemns tidy city plans which

lay out discretely bounded neighborhoods, zone one area for housing and another for business, or establish areas just for universities or cultural facilities. He sees human activity as much more complex and overlapping than that.

Alexander's approach to describing how cities should be designed in this selection may trouble readers who seek clear, rational guidelines. He takes the position that not enough is yet known about how to design non-treelike cities to provide definite answers. Like an artist or a Zen master instructing an apprentice, Alexander closes this selection with provocative analogies, examples, and metaphors. He suggests how an individual might pursue the quest for good design, but he does not offer a stock set of the answers.

During the past three decades Alexander and his colleagues and students at the Center for Environmental Structure at the University of California of Berkeley have conducted a series of "experiments" working to understand and demonstrate how to design cities which are not "trees". Alexander's writings since "A City Is Not a Tree" provide an abundance of specific principles and examples as well as many more unanswered questions and lines for exploration.

While Alexander is fascinated with physical form, his approach begins with an interactive process working with clients to understand their most fundamental needs. Profoundly respectful of the ideas of clients, Alexander's projects incorporate rammed earth and chicken wire into housing for Mexicali slum dwellers and Zen architectural details into a Japanese school. He and his followers seek architecture which is "alive"; architecture that possesses "the quality without a name".

Consider the relevance of J. B. Jackson's description of how the informal vernacular architecture of small U. S. towns meets human needs to Alexander's conviction that built environments that grow organically contain important lessons for planners. Alexander shares architectural critic Jane Jacobs's love of apparently chaotic, jumbled urban neighborhoods. Like Jacobs he sees a complex order and rationality behind an apparently disorderly facade. Consider Alexander's concept of a semi-lattice structure in relation to Jacobs's argument for designing streets to provide play space for children, security, and areas for human interaction as well as space for cars to drive. A casual observer might consider the resulting street a confused and disorderly one. She might not see how it meets multiple, complex human needs. Alexander would like to help architects and planners design streets which achieve the positive qualities of lively streets in New York's Greenwich Village or Boston's West End before urban renewal tidied up (and deadened) the streetscape. Note also the similarity to British architect/planner Raymond Unwin's respect for natural cities and for urban forms shaped by the ideas of their residents.

Alexander's theories are developed in a series of books published by Oxford University Press in New York: *The Oregon Experiment* (1975), *A Pattern Language* (1977), *The Timeless Way of*

Building (1979), The Linz Cafe (1981), The Production of Houses (1985), and A New Theory of Urban Design (1987). An overview of his work by Ingrid F. King is “Christopher Alexander and Contemporary Architecture” in *Architecture and Urbanism* (August 1993).

Words and Phrases

1. incorporate into 结合/incorporate with
2. psychological *adj.* 心理(上)的/spiritual 精神上的
3. built environment 建成环境
4. break with 断交, 决裂
5. self-proclaimed *adj.* 自称的
6. iconoclast *n.* 反偶像者, 提倡打破旧习的人
7. single out 挑选(出)
8. megastructure *n.* 巨型结构
9. sterility *n.* 贫乏
10. decipher *v.* 解码, 破解/decode
11. paradigm *n.* 范例, 范型
12. discretely *adv.* 分离的
13. zone *n.* 分区
14. overlap *v.* 重叠, 交迭/superimpose
15. Zen 禅(佛教)
16. metaphor *n.* 隐喻
17. rammed earth 夯土
18. vernacular *adj.* 本土的, 本国的, 地方的
19. renewal *n.* 更新/renovation/revitalization

Section 2

Extensive Reading

Paolo Soleri

Born in Turin, Italy on June 21, 1919, Paolo Soleri was awarded his Ph. D. with highest honors in architecture from the Torino Polytechnico in 1946. He came to the United States in 1947 and spent a-year-and-a-half in fellowship with Frank Lloyd Wright at Taliesin West in Arizona, and at Taliesin East in Wisconsin. During this time, he gained international recognition for a bridge design displayed at the Museum of Modern Art and published in *The Architecture of Bridges* by Elizabeth Mock.

He returned to Italy in 1950 where he was commissioned to build a large ceramics factory, “Ceramica Artistica Solimene”. The processes he became familiar with in the ceramics industry led to

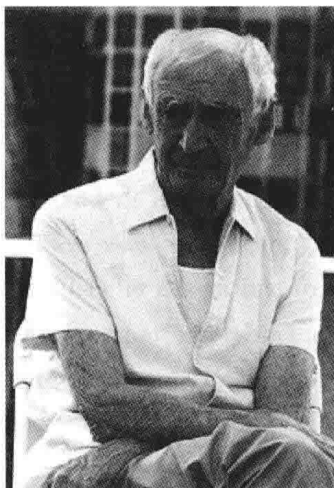


Figure 1-1 Paolo Soleri

his award-winning designs of ceramic and bronze wind bells and silt cast architectural structures. For over 30 years, the proceeds from the wind bells have provided funds for construction to test his theoretical work (Figure 1-1).

In 1956 he settled in Scottsdale, Arizona, with his wife, Colly, and their two daughters. Dr. and Mrs. Soleri made a life-long commitment to research and experimentation in urban planning, establishing the Cosanti Foundation, a not-for-profit educational foundation.

The Foundation's major project is Arcosanti, a prototype town for 5,000 people designed by Soleri, under construction since 1970.

Located at Cordes Junction, in central Arizona, the project is based on Soleri's concept of "Arcology," architecture coherent with ecology. Arcology advocates cities designed to maximize the interaction and accessibility associated with an urban environment; minimize the use of energy, raw materials and land, reducing waste and environmental pollution; and allow interaction with the surrounding natural environment.

A landmark exhibition, "The Architectural Visions of Paolo Soleri," organized in 1970 by the Corcoran Gallery of Art in Washington, DC, traveled extensively in the U.S. and Canada, breaking records for attendance. "Two Suns Arcology, A Concept for Future Cities" opened at the Xerox Square Center in Rochester, New York, in 1976. In 1989 "Paolo Soleri Habitats: Ecologic Minutiae", and exhibition of arcologies, space habitats and bridges, was presented at the New York Academy of Sciences. Most recently, "Soleri's Cities, Architecture for the Planet Earth and Beyond" was featured at the Scottsdale Center for the Arts in Scottsdale, AZ. His work has been exhibited worldwide.

Soleri has received one fellowship from the Graham Foundation and two from the Guggenheim Foundation. He has been awarded three honorary doctorates, the American Institute of Architects Gold Medal for Craftmanship in 1963, the Gold Medal from the World Biennial of Architecture in Sofia, Bulgaria, in 1981, and the Silver Medal of the Academie Architecture in Paris, 1984. Soleri is a distinguished lecturer in the College of Architecture at Arizona State University.

He has written six books and numerous essays and monographs. When he is not traveling on the international lecture circuit, Soleri divides his time between Cosanti, the original site for his research located in Scottsdale, and Arcosanti.

Resources for Reference

<http://www.patternlanguage.com>

<http://www.arcosanti.org>

Section 3

Tips for Translation

General Principles for Translation 翻译的一般原则

19 世纪末翻译家严复提出的“信、达、雅”，直到今天还常常被作为评价翻译工作是否到位的一般标准。

所谓“信”指的是翻译要忠实于原文。无论是英译汉还是汉译英，其最终目的是让读者了解原文的意思。特别是对于专业英语的翻译，更是必须符合原意，不能有任何篡改。因此合格的翻译必须建立在充分理解原文的基础上，不但要以读懂原文的字面意思为基础，更要力求品味出原文内在的语气、倾向。

应该注意的是，追求翻译中的“信”，并不是不知变通的“硬译”、“死译”，要避免一味固守词对词、短语对短语、句子对句子、结构对结构的“对译”，而丝毫不考虑英汉两种语言在语言习惯和语法特征等方面的固有差异。特别是在汉译英的时候，最不好的习惯是在汉英词典中搜寻汉语词汇对应的英语词汇，并不加分析地直接套用。殊不知同样的汉语词汇由于上下文的不同，真正的含义往往大相径庭，而同样的英语词汇其汉译却常常是不一样的。例如同样一个“保护”，在“环境保护”和“历史保护”中的英译就完全不同，同样一个“ambition”，可以翻译成“野心”，也可以翻译成“志向”，这样的例子也是不一而足。

所谓“达”通常是指翻译要通顺。英译汉和汉译英要达到“达”的要求，必须符合译文的语言习惯。例如，在英译汉时要体现“达”，就必须把英语原文翻译成合乎汉语规范和习惯的文字，也就是说译文必须是明白通畅的现代汉语。例如，有人将“His addition completed the list”翻译成“他的加入结束了名单”或“他的加入完成了名单”，十分别扭，根本不符合汉语的表达习惯。关于上句，如果翻译为“把他添上，名单就全了”不但容易看懂，读起来也顺口多了。

“信”、“达”、“雅”三个标准，是从易到难的。可以说“雅”就是翻译的最高要求和最高境界。所谓“雅”，就是要使译文流畅，有文采。要达到“雅”的标准，译者必须同时具备很高的英语和汉语修养。从建筑学专业英语的角度来看，翻译的最基本要求是“信”和“达”，即力求准确、流畅。

